

FIG. 1

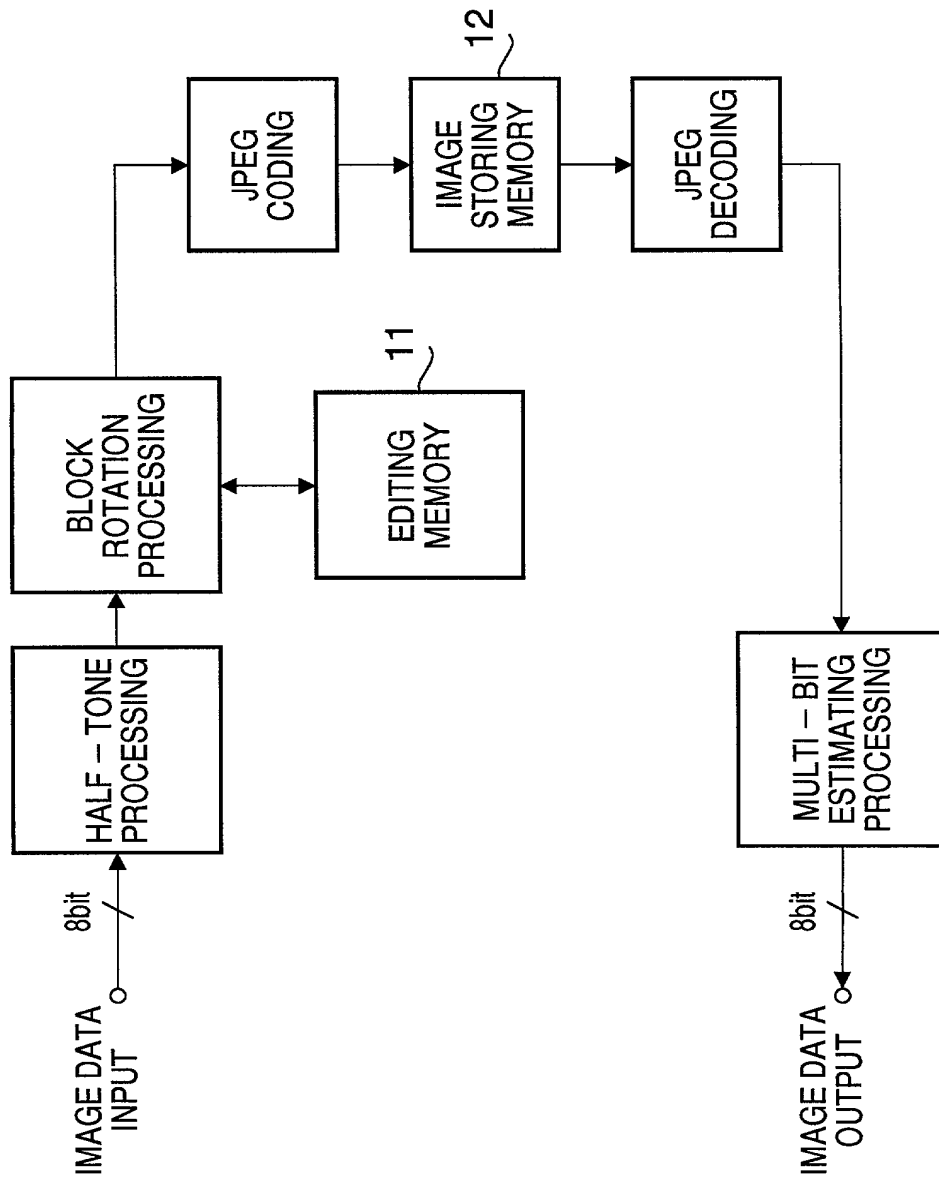
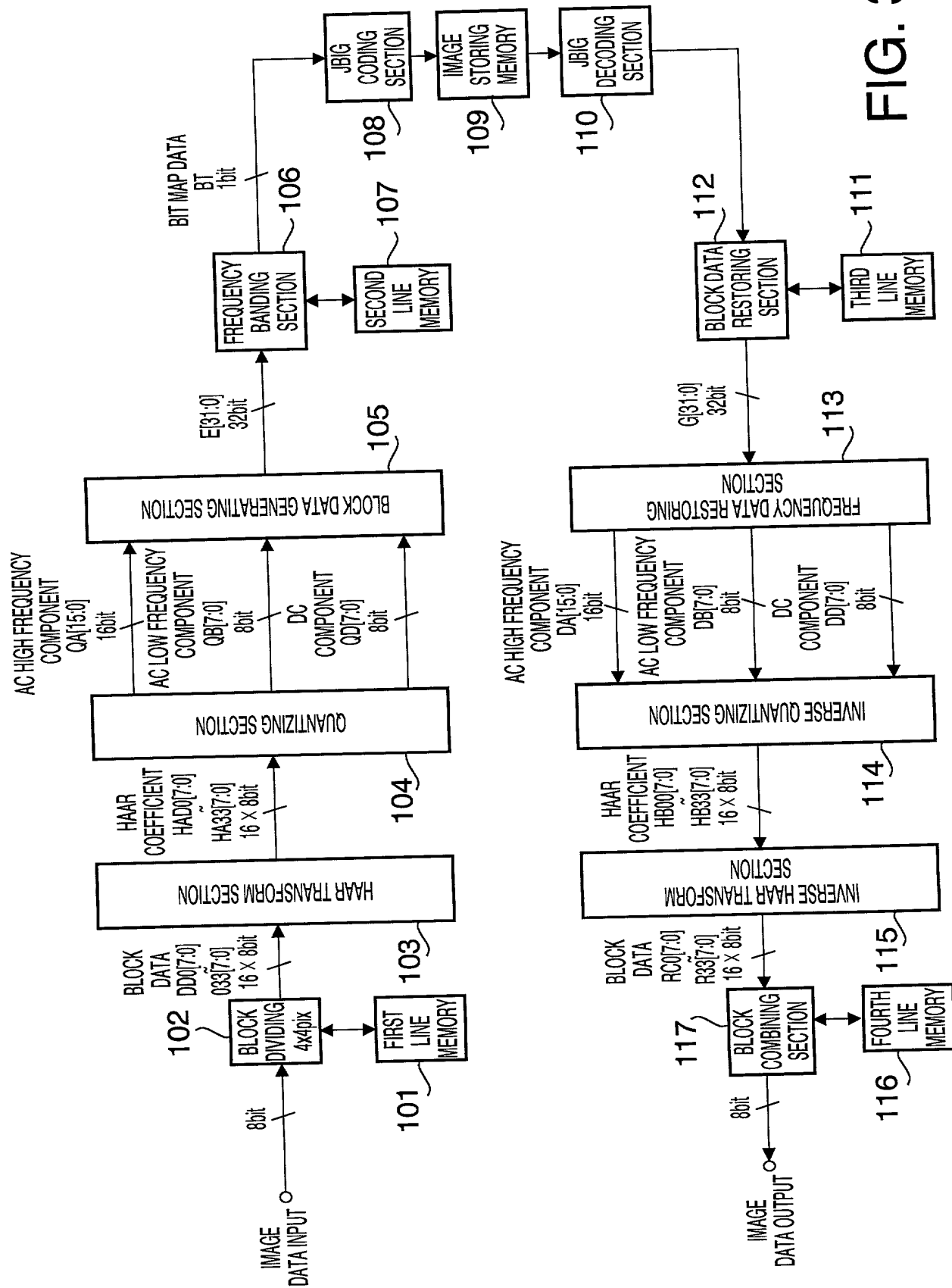
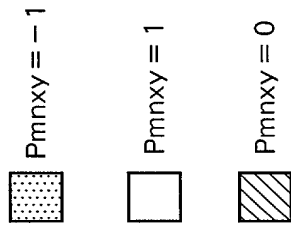


FIG. 2



PRIMARY PATTERN(P_{mny})
(MN ARE OMITTED IN THE FIGURE)



m = 0				m = 1				m = 2				m = 3				
P00	P01	P02	P03	P00	P01	P02	P03	P00	P01			P02	P03	n = 3		
P10	P11	P12	P13	P10	P11	P12	P13	P10	P11				P12			P13
P20	P21	P22	P23	P20	P21	P22	P23	P20	P21	P22	P23	P22	P23	n = 2		
P30	P31	P32	P33	P30	P31	P32	P33	P30	P31	P32	P33	P32	P33			
P00	P01	P02	P03	P00	P01	P02	P03	P00	P01			P02	P03			n = 1
P10	P11	P12	P13	P10	P11	P12	P13	P10	P11			P12	P13			
P20	P21	P22	P23	P20	P21	P22	P23	P20	P21	P22	P23	P22	P23	n = 0		
P30	P31	P32	P33	P30	P31	P32	P33	P30	P31	P32	P33	P32	P33			
P00	P01	P02	P03	P00	P01	P02	P03	P00	P01			P02	P03			
P10	P11	P12	P13	P10	P11	P12	P13	P10	P11			P12	P13			
P20	P21	P22	P23	P20	P21	P22	P23	P20	P21	P22	P23	P22	P23			
P30	P31	P32	P33	P30	P31	P32	P33	P30	P31	P32	P33	P32	P33			

FIG. 4

HA03 (AC600dpi COMPONENT)	HA13 (AC600dpi COMPONENT)	HA23 (AC600dpi COMPONENT)	HA33 (AC600dpi COMPONENT)
HA02 (AC600dpi COMPONENT)	HA12 (AC600dpi COMPONENT)	HA22 (AC600dpi COMPONENT)	HA32 (AC600dpi COMPONENT)
HA01 (AC300dpi COMPONENT)	HA11 (AC300dpi COMPONENT)	HA21 (AC600dpi COMPONENT)	HA31 (AC600dpi COMPONENT)
HA00 (DC COMPONENT)	HA10 (AC300dpi COMPONENT)	HA20 (AC600dpi COMPONENT)	HA30 (AC600dpi COMPONENT)

FIG. 5

HA03 (AC600dpi COMPONENT)	HA13 (AC600dpi COMPONENT)	HA23 (AC600dpi COMPONENT)	HA33 (AC600dpi COMPONENT)
HA02 (AC600dpi COMPONENT)	HA12 (AC600dpi COMPONENT)	HA22 (AC600dpi COMPONENT)	HA32 (AC600dpi COMPONENT)
HA01 (AC300dpi COMPONENT)	HA11 (AC300dpi COMPONENT)	HA21 (AC600dpi COMPONENT)	HA31 (AC600dpi COMPONENT)
HA00 (DC COMPONENT)	HA10 (AC300dpi COMPONENT)	HA20 (AC600dpi COMPONENT)	HA30 (AC600dpi COMPONENT)



TRANSFORM INTO DATA OF
PREDETERMINED NUMBER BITS WITH
EQUAL SLICE LEVELS DETERMINED BY
THE NUMBER OF QUANTIZED BITS

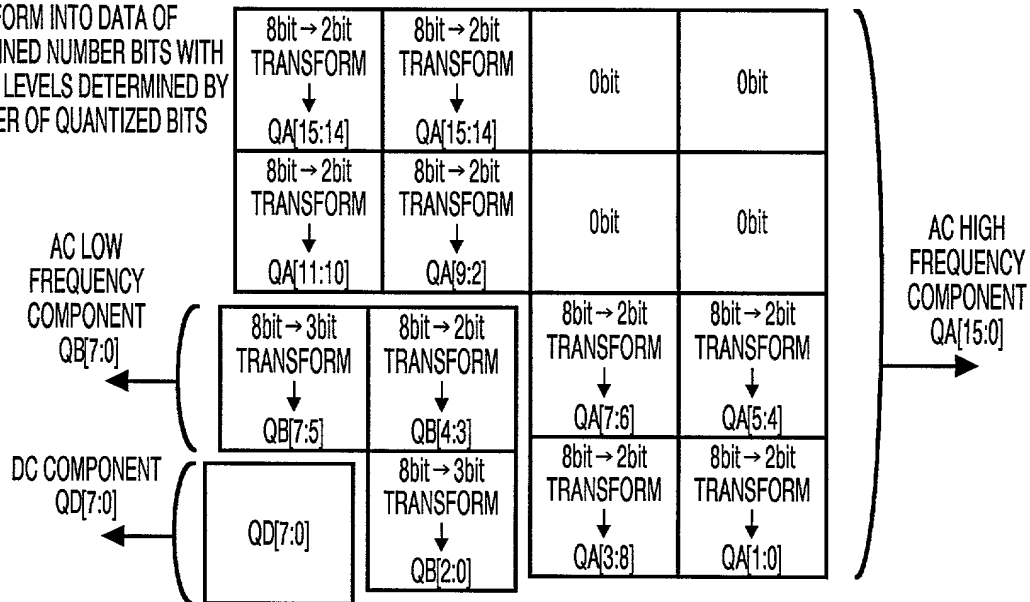
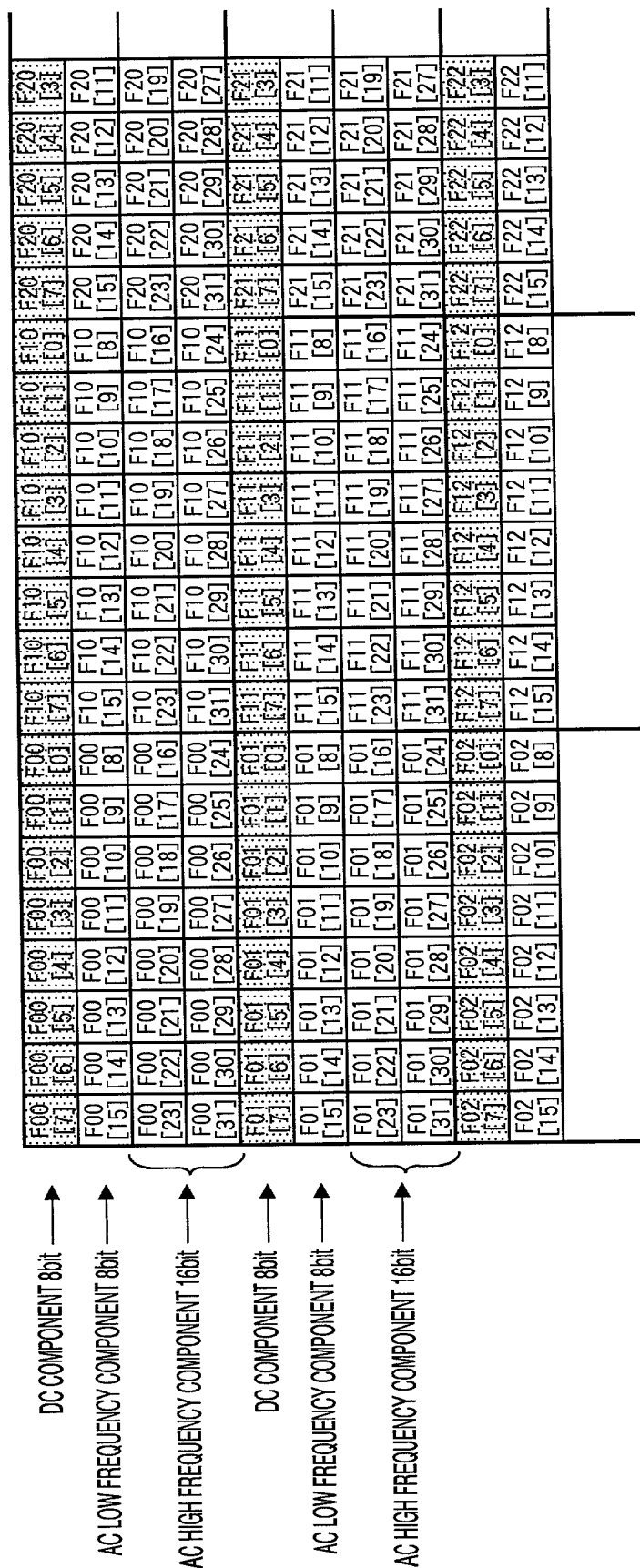
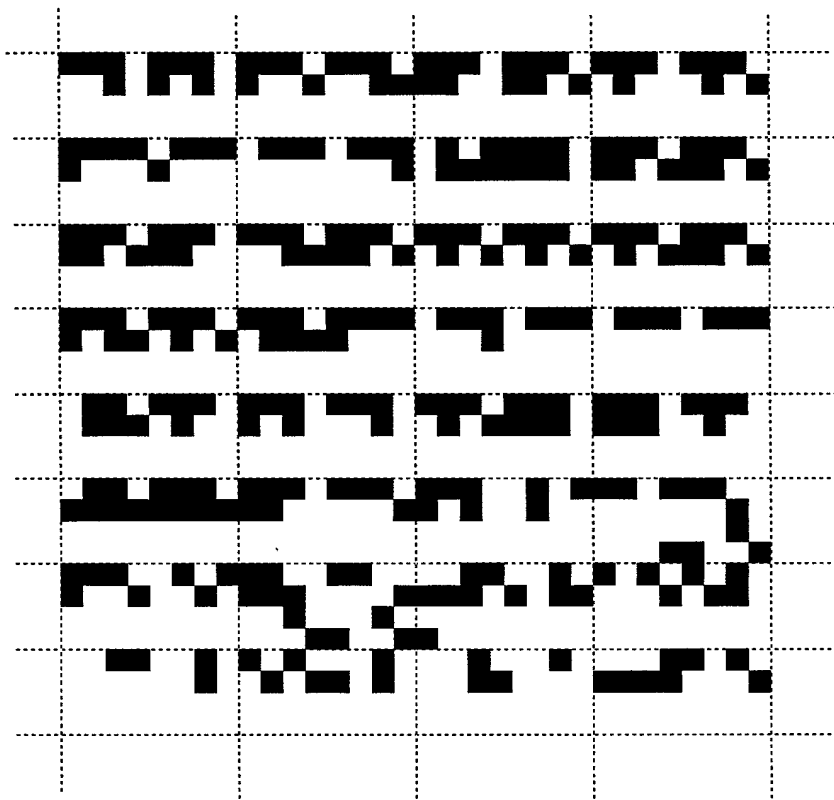


FIG. 6



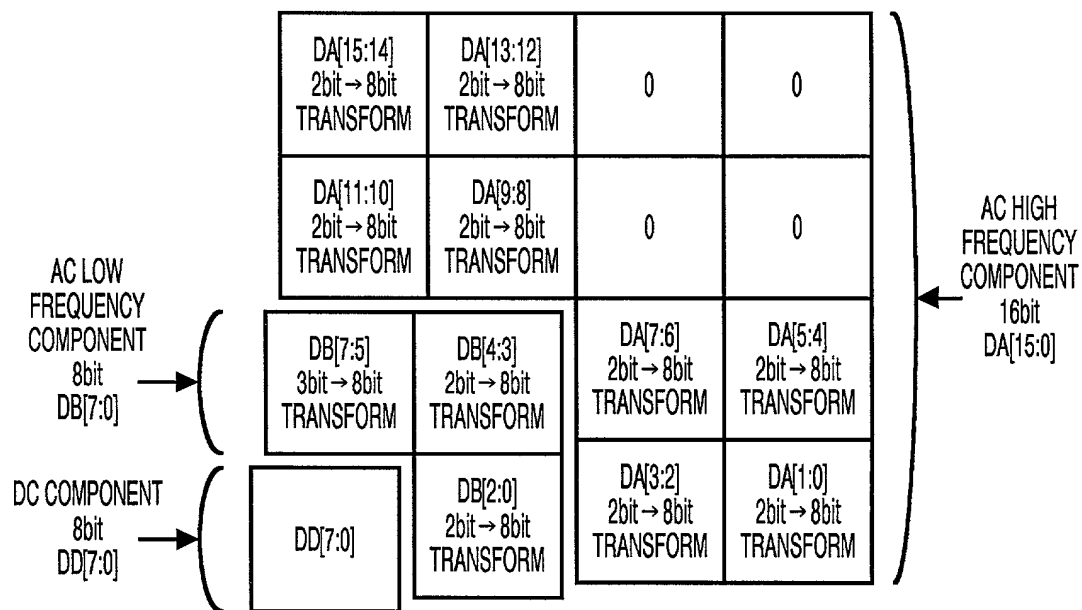
BIT MAP PATTERN ARRANGEMENT

FIG. 7



ACTUAL BIT MAP DATA SUBJECTED TO FREQUENCY BANDING

FIG. 8



HB03 (AC600dpi COMPONENT)	HB13 (AC600dpi COMPONENT)	HB23 (AC600dpi COMPONENT)	HB33 (AC600dpi COMPONENT)
HB02 (AC600dpi COMPONENT)	HB12 (AC600dpi COMPONENT)	HB22 (AC600dpi COMPONENT)	HB32 (AC600dpi COMPONENT)
HB01 (AC300dpi COMPONENT)	HB11 (AC300dpi COMPONENT)	HB21 (AC600dpi COMPONENT)	HB31 (AC600dpi COMPONENT)
HB00 (DC COMPONENT)	HB10 (AC300dpi COMPONENT)	HB20 (AC600dpi COMPONENT)	HB30 (AC600dpi COMPONENT)

INVERSE QUANTIZATION PROCESSING

FIG. 9

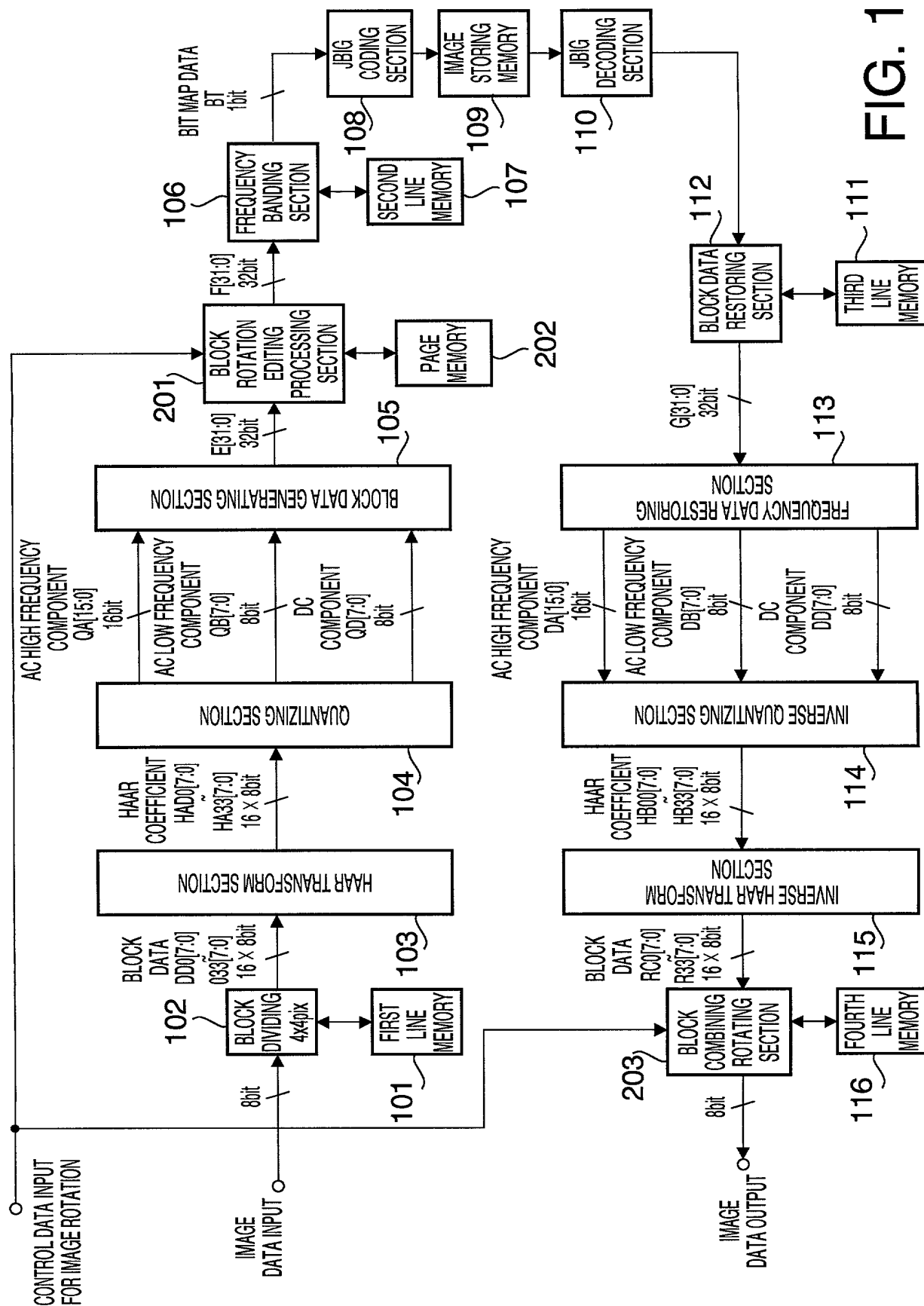


FIG. 10

PAGE MEMORY WRITE ORDER

E00	E10	E20	E30
F	F	F	F
E01	E11	E21	E31
F	F	F	F
E02	E12	E22	E32
F	F	F	F
E03	E13	E23	E33
F	F	F	F
E04	E14	E24	E34
F	F	F	F

PAGE MEMORY READ ORDER

$$F_{x,y}[31:0] = E_{3-y,x}[31:0]$$

COUNTERCLOCKWISE
90 ROTATION

E30	E31	E32	E33	E34
F	F	F	F	F
E20	E21	E22	E23	E24
F	F	F	F	F
E10	E11	E12	E13	E14
F	F	F	F	F
E00	E01	E02	E03	E04
F	F	F	F	F

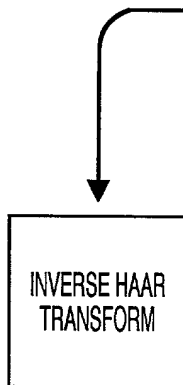
NOTE) F IS INDICATIVE OF DIRECTION
OF IMAGE IN BLOCK

BLOCK ROTATION EDITING PROCESSING

FIG. 11

RESTORED BLOCK DATA IMAGE

G30	G31	G32	G33	G34
F	F	F	F	F
G20	G21	G22	G23	G24
F	F	F	F	F
G10	G11	G12	G13	G14
F	F	F	F	F
G00	G01	G02	G03	G04
F	F	F	F	F



R00	R01	R02	R03
R10	R11	R12	R13
R20	R21	R22	R23
R30	R31	R32	R33

BLOCK COMBINED IMAGE

R03	R02	R01	R00
R13	R12	R11	R10
R23	R22	R21	R20
R33	R32	R31	R30

COUNTERCLOCKWISE 90°
ROTATION OF IMAGE IN BLOCK

K30	K31	K32	K33	K34
K20	K21	K22	K23	K24
K10	K11	K12	K13	K14
K00	K01	K02	K03	K04

OUTPUT IMAGE DATA

ROTATION PROCESSING OF IMAGE IN BLOCK

FIG. 12

Ea00	Ea10	Ea20	Ea30	Eb00	Eb10	Eb20	Eb30
F	F	F	F	F	F	F	F
Ea01	Ea11	Ea21	Ea31	Eb01	Eb11	Eb21	Eb31
F	F	F	F	F	F	F	F
Ea02	Ea12	Ea22	Ea32	Eb02	Eb12	Eb22	Eb32
F	F	F	F	F	F	F	F
Ea03	Ea13	Ea23	Ea33	Eb03	Eb13	Eb23	Eb33
F	F	F	F	F	F	F	F
Ea04	Ea14	Ea24	Ea34	Eb04	Eb14	Eb24	Eb34
F	F	F	F	F	F	F	F



Ea00	Ea10	Ea20	Ea30	Eb00	Eb10	Eb20	Eb30
F	F	F	F	F	F	F	F
Ea01	Ea11	Ea21	Ea31	Eb01	Eb11	Eb21	Eb31
F	F	F	F	F	F	F	F
Ea02	Ea12	Ea22	Ea32	Eb02	Eb12	Eb22	Eb32
F	F	F	F	F	F	F	F
Ea03	Ea13	Ea23	Ea33	Eb03	Eb13	Eb23	Eb33
F	F	F	F	F	F	F	F
Ea04	Ea14	Ea24	Ea34	Eb04	Eb14	Eb24	Eb34
F	F	F	F	F	F	F	F

IMAGE COMBINING EDITING PROCESSING

FIG. 13

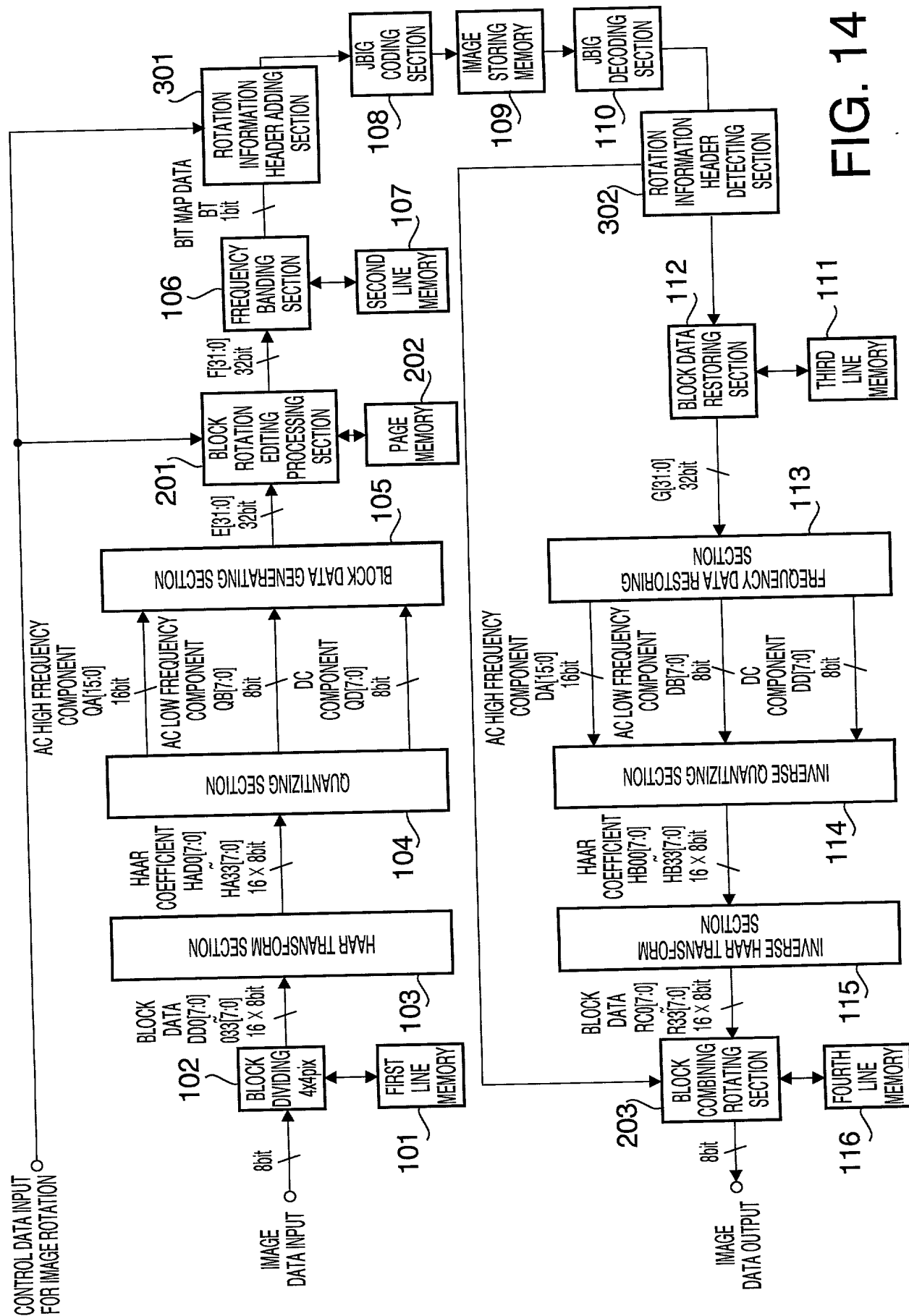


FIG. 14

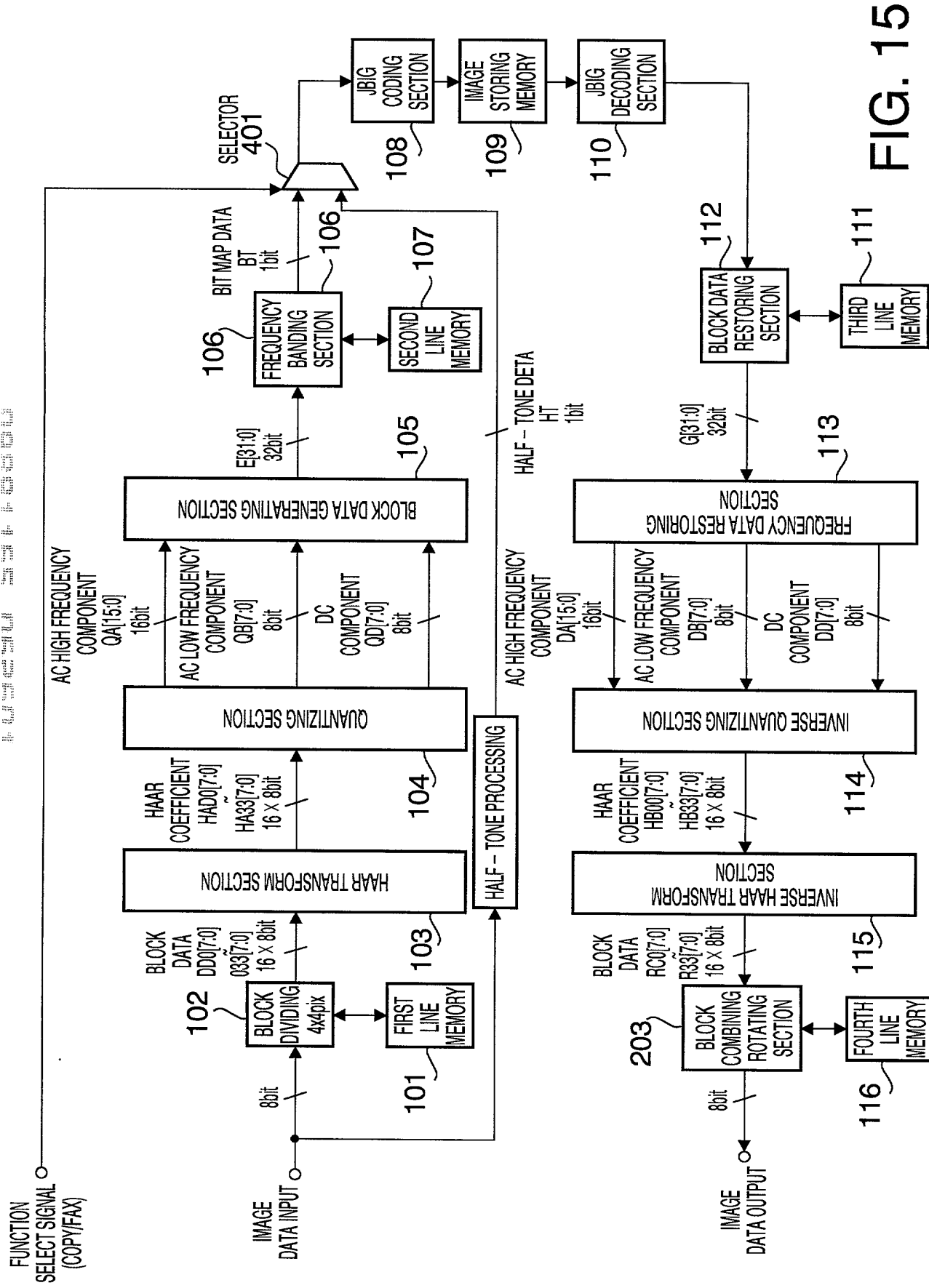


FIG. 15

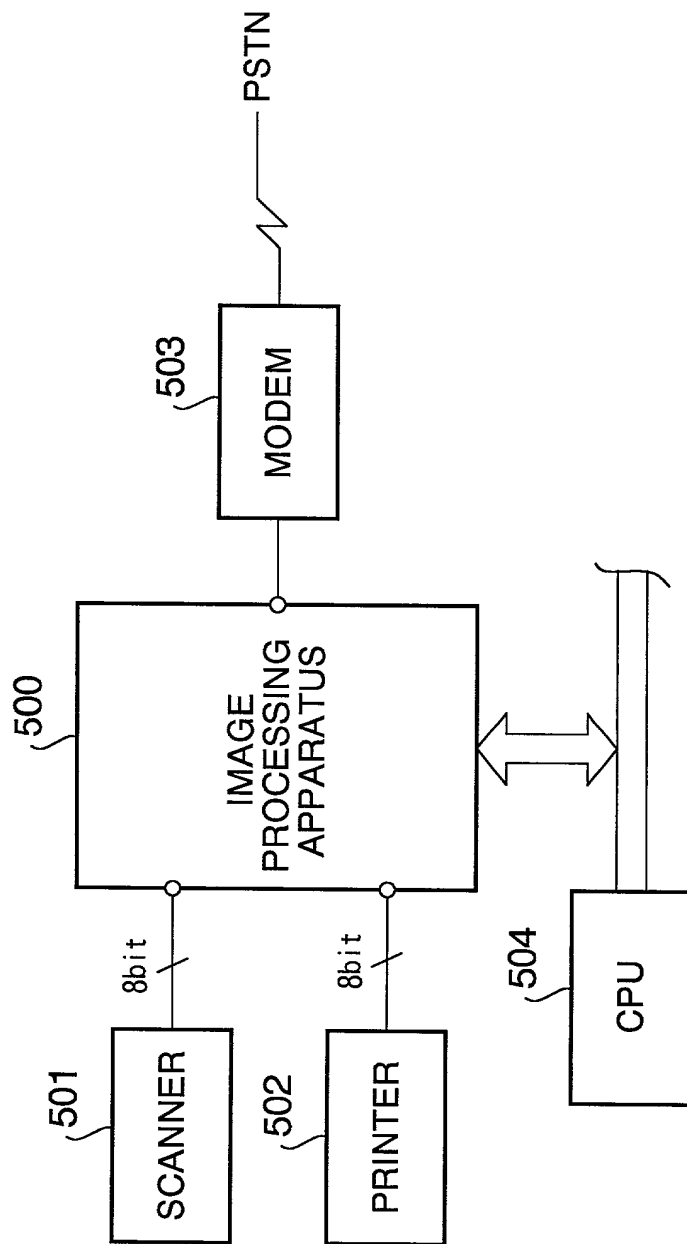


FIG. 16